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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference fillit	FOR FURTHER ACTION <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. PCT/GB 00/ 02586	International filing date (day/month/year) 05/07/2000	(Earliest) Priority Date (day/month/year) 19/08/1999
Applicant HARPAZ, Yehouda		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

3

☐ as suggested by the applicant.

☐ None of the figures.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/02586

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A63F3/02 A63F3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A63F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 019 226 A (ATARI) 31 October 1979 (1979-10-31) page 1, line 68 - line 100 page 1, line 114 -page 2, line 8 claims 1-5; figure 1 ---	1-5
X	WO 98 19758 A (GOLAD) 14 May 1998 (1998-05-14) the whole document ---	1-5
X	WO 97 26057 A (TIGER ELECTRONICS) 24 July 1997 (1997-07-24) the whole document ---	1-5
A	EP 0 403 130 A (NELSON ET AL.) 19 December 1990 (1990-12-19) column 4, line 20 -column 6, line 9 --- -/--	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

18 September 2000

Date of mailing of the international search report

26/09/2000

Name and mailing address of the ISA

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Authorized officer

Raybould, B

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/02586

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 4 244 635 A (SASAKI ET AL.) 13 January 1981 (1981-01-13) the whole document -----</p>	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 00/02586

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2019226	A	31-10-1979	DE 2915137 A JP 54140631 A	25-10-1979 01-11-1979
WO 9819758	A	14-05-1998	NL 1004407 C AU 4728297 A CN 1235558 A EP 0935491 A	08-05-1998 29-05-1998 17-11-1999 18-08-1999
WO 9726057	A	24-07-1997	US 5743796 A AU 7430796 A	28-04-1998 11-08-1997
EP 403130	A	19-12-1990	AU 5701390 A CA 2018955 A GB 2232898 A,B JP 3097476 A ZA 9004601 A	20-12-1990 14-12-1990 02-01-1991 23-04-1991 24-04-1991
US 4244635	A	13-01-1981	NONE	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference fillit	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/02586	International filing date (day/month/year) 05/07/2000	Priority date (day/month/year) 19/08/1999
International Patent Classification (IPC) or national classification and IPC A63F3/02		
Applicant HARPAZ, Yehouda		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 6 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 28/02/2001	Date of completion of this report 28.09.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Squeri, M Telephone No: +49 89 2399 8417 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/02586

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-10 as originally filed

Claims, No.:

1-5 as received on 28/02/2001 with letter of 24/02/2001

Drawings, sheets:

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02586

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	5
	No:	Claims	1-4
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-5
Industrial applicability (IA)	Yes:	Claims	1-5
	No:	Claims	

2. Citations and explanations
see separate sheet

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

Reference is made to the following documents:

D1: GB-A-2019226
D2: WO 98/19758
D3: WO 97/26057
D4: EP-A-403130
D5: WO 00/57972

SECTION V:

1. The document D2 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses an electronic board (cf. D2: page 1, lines 68-100 and page 1, line 114- page 2, line 8 and Fig. 3C) comprising:
 - a. a grid of grid points 9 on a flat surface,
 - b. where each grid point is a visible element which is capable of detecting when it is pressed (page 3, lines 10-11), and
 - c. can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface (page 3, lines 11-15 and lines 34-37); and
 - d. a character display (12E, 13E, 14E or 15E)
 - e. a game manager 11 made of a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed, and
 - f. a computer program (page 1, lines 12-14) which is executed by the CPU, which manages a game in which
 - g. when a player presses a point, the games manager changes the illumination of a pattern of points around this point, and
 - h. when all the points are switched on, the games manager, using the character display, declares as the winner the player of the colour of the majority of the points.

The subject-matter of claim 1 therefore differs from this known electronic board in that it discloses a game in which the colour of the points around the pressed one is changed to the player colour if they were switched off, or their colour is reversed if they were on. However, these differences define merely the rules for playing the new

game, rather than the technical features of the apparatus. Therefore, these features do not limit the subject-matter of claim 1 and no examination is required for these features (Rule 67.1.iii PCT).

Consequently, the subject-matter of claim 1 of the present application has the same technical features as the device disclosed in D2 and therefore claim 1 does not meet the requirements set forth in Article 33(2) PCT.

2. Document D4, considered independently from D2, is also considered to destroy the novelty of claim 1, since it already discloses all the technical features of claim 1 (cf. D4: column 4, lines 20-52 and column 5, line 58- column 6, line 2).
3. Moreover, also document D1 is considered to destroy the novelty of claim 1 because in this claim the illumination of the grid points, which is introduced by a "can", is considered to be merely an option and, therefore, it is considered that it does not limit the subject-matter only to the electronic boards with an illumination source.
4. It is also drawn to the attention of the applicant that, also if claim 1 would have been amended in order to render the differentiating features technical (for example disclosing them as features of the electronic board, and not as rules for the new game), in any case it would have not been possible to find an objective technical problem which would have been overcome from the applicant with the electronic board disclosed in this new claim 1 and, consequently, the subject-matter of this claim would have not been considered as involving an inventive step (Article 33.3 PCT).
5. Furthermore, the following objections about the dependent claims are raised:

Claim 2
It is clear from D2 that these features are already known.

Claims 3 and 4
Document D4 already discloses an implement which is used for pressing a point and, therefore, for communicating with the board.

Claim 5
It is apparent from D2 that an hexagonal pattern of the points could not be considered as involving an inventive step (cf. D2: page 2, lines 18-25 and page 3,

lines 6-8).

SECTION VI:

6. Although D5 (filing date: 23.03.2000; Priority date: 29.03.99; publication date: 05.10.2000) is not prior art according to R. 64.1(a) PCT, it should be noticed that it discloses subject-matter which is considered very relevant in respect of what is claimed in the present application.

SECTION VII:

7. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D5 is not mentioned in the description, nor are these documents identified therein.

SECTION VIII:

8. The embodiments of the invention relating not to "FillIt" but to other games (Othello, Go, Ghost, Life1, Life2, ToucIt, Symmetry, ClearIt, FindThem, CountLines, Visiput, etc.) in the description do not fall within the scope of the claims, which are limited to the game "FillIt". This inconsistency between the claims and the description leads to doubt concerning the matter for which protection is sought, thereby rendering the claims unclear (Article 6 PCT).
9. Some of the features in the apparatus claim 1 relate to a method of using the apparatus rather than clearly defining the apparatus in terms of its technical features. The intended limitations are therefore not clear from this claim, contrary to the requirements of Article 6 PCT. In order to overcome this objection, the features relating to the computer game should have been written in the form "means for".

CLAIMS

1 An electronic board comprising:

a grid of *grid points* on a flat surface, where each *grid point* is a visible element which is capable of detecting when it is pressed, and can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface; and

a *game manager* made of

a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed, and a computer program which is executed by the CPU,

which manages a game in which

Each player in his turn presses a point which causes a pattern of points around this point to be switched on with the player colour if they were off, or reverse their colour if they were on;

the winner is the player that has more points when all the points are switched on.

2 A board as described in Claim 1, where only unilluminated points are legal moves.

3 A board as described in any preceding claim, where pressing a point is done by special implement that causes a short circuit which the board uses to identify the point that is pressed.

4 A board as described in any preceding claim, where the players use, hold or wear a special implement which identifies which player is playing by communicating with the board.

5 A board as described in any preceding claim, where the grid points are in an hexagonal pattern.